

-1- (JAPIO)  
ACCESSION NUMBER  
TITLE  
PATENT APPLICANT  
INVENTORS  
PATENT NUMBER  
APPLICATION DETAILS  
SOURCE

86-153948  
ALKALINE STORAGE BATTERY  
(2000307) TOSHIBA CORP  
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INT'L PATENT CLASS  
JAPIO CLASS

H01M-004/38; H01M-004/42  
42.9 (ELECTRONICS--Other); 14.2 (ORGANIC  
CHEMISTRY--High Polymer Molecular Compounds)

ABSTRACT

PURPOSE: To reduce the generation of hydrogen gas in  
an alkaline storage battery by covering the surface  
of a negative electrode active material made of  
active metal with vinyl polymer film and using the  
active material with the electrolyte of a caustic  
alkaline aqueous solution to obtain the negative  
electrode black mix.

CONSTITUTION: The negative electrode black mix in a  
sealed alkaline storage battery is formed by using a  
negative electrode active material made of active  
metal such as zinc and the electrolyte of a caustic  
alkaline aqueous solution as the essential  
components. In this case, the surface of the negative  
electrode active material is covered with the vinyl  
polymer film whose monomer unit is indicated by an  
expression  $(CH(\text{sub } 2)=CR(\text{sup } 1)R(\text{sup } 2))$ ,  $(R(\text{sup } 1))$   
and  $R(\text{sup } 2)$  are selected from a hydrogen atom,  
halogen element, nitrile group, etc.) at a thickness  
of 0.01 to 70. $\mu$ m. As a result, since the film  
functions as a protective coat against the caustic  
alkaline aqueous solution and the dissolution of the  
negative electrode active material is suppressed, the  
generation of hydrogen gas can be reduced without  
mercury and such.